停留精巣に発生した巨大セミノーマの1例

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GIANT SEMINOMA IN ABDOMINAL RETENTION OF THE TESTIS MANIFESTED WITH UNILATERAL LEG PAIN : A CASE REPORT

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A 26-year-old man was admitted to the department of surgery of our hospital with a complaint of intermittent left leg pain for the past two weeks. Ultrasonography revealed reduced blood flow to the tibial artery, which suggested a vascular disease like arteriosclerosis obliterans. Enhanced computed tomography (CT) revealed a huge abdominal tumor and a 3-dimensional CT scan showed a feeding artery from the left renal artery to the huge tumor. Findings of routine blood and urine examinations were elevated levels of lactate dehydrogenase, alkaline phosphatase, and C-reactive protein. Surgical exploration revealed a giant tumor with clouded ascites in the abdominal cavity containing class V cells revealed by cytological examination. The tumor was easily resected. Its vascular pedicle was thick and hypertrophied. Thus, it could be traced to the origin of left gonadal artery. At this time, the surgeon incidentally noticed the absence of left testis in the patient's scrotum. The resected specimen was 25×18×12 cm in size, and it weighed 3,000 gm. The histological finding was pure seminoma invaded to peritoneum. His leg pain was relieved after the tumor resection.

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Key words : Seminoma, Undescended testis

INTRODUCTION

Testicular tumors are uncommon and ectopic testes are more prone to malignancy. Intra-abdominal testicular carcinomas generally have large tumors in testicular carcinoma, and tend to manifest through abdominal swelling and/or abdominal pain. A case of unilateral giant abdominal seminoma manifested with leg pain in the patient with unilateral intra-abdominal testis is presented.

CASE REPORT

A 26-year-old man was admitted to the department of surgery of our hospital with a complaint of intermittent left leg pain for the past two weeks. Doppler ultra sonography revealed reduced blood flow to the tibial artery, which suggested that leg pain was induced by vascular disease like arteriosclerosis obliterans. A huge abdominal tumor in the abdominal cavity was revealed by enhanced computed tomography and poor enhancement of the tumor suggested that it was a malignant lymphoma or stromal tumor. Paraaortic lymphadenopathy was also revealed by the scan. Three-dimensional CT showed the feeding artery came from the left renal artery to the huge tumor, retrospectively. On physical examination, skin striae and a large abdominal tumor without pain were noted. Findings from routine blood and urine examination were elevated levels of LDH 2,921 IU/l (<202), ALP 6,134 IU/l (<336), CRP 2.0 mg/dl (<0.2). Surgical exploration through a lower abdominal incision revealed a smooth surface, giant tumor and clouded ascites in the abdominal cavity containing class V cell which were revealed by cytological examination, but apparent metastasis could not be detected. The tumor did not adhere to the surrounding structure and its vascular pedicle was thick and hypertrophied and could be traced to the origin of left gonadal artery. The tumor was easily resected, but retroperitoneal lymphadenopathy was not found. The surgeon incidentally noticed the absence of testis in the patient's left scrotum. The unilateral cryptorchidism was not detected previously and his parents were unaware of it. The resected specimen was 25×18×12 cm in size, and it weighed 3,000 gm. The histological finding was pure seminoma with capsular invasion to peritoneum, so the patient was referred to our department. No elevation of tumor marker was detected in the post-operative period (AFP, beta-hCG were not examined before operation). His leg pain was relieved after tumor resection and computed tomography following 2 courses of chemotherapy (cisplatin, etoposide, bleoimycin) and 1 course of chemotherapy (cisplatin, etoposide) revealed no lymphadenopathy and no metastasis.

DISCUSSION

An ectopic testis is more prone to malignancy than one normally placed, about 40 times more often than would be expected from chance association[1]. The higher the position of the undescended testis, the higher the risk of developing malignancy[2] Almost half of the tumors developed from undescended testis are testes located abdomen, sixfold higher than for inguinal testes. This is attributed to higher abdominal temperature and

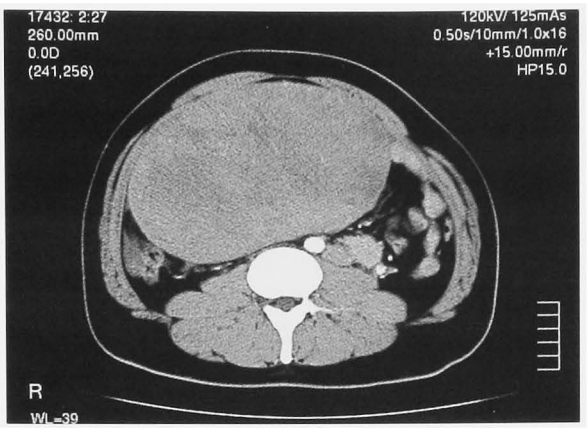


Fig. 1. Abdominal CT revealed huge intraabdominal mass, which is not well enhanced.

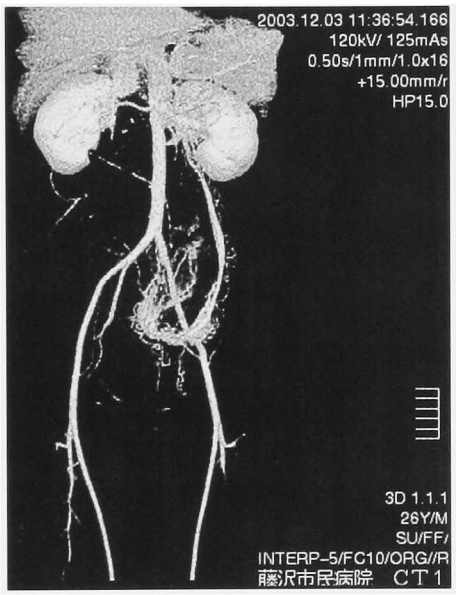


Fig. 2. 3-D CT revealed feeding artery from left renal artery to large non-enhanced tumor.

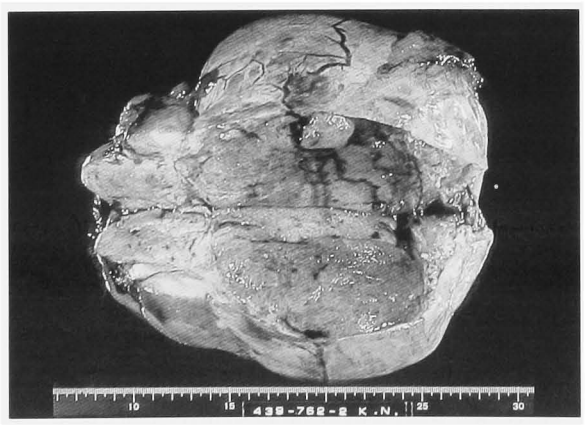
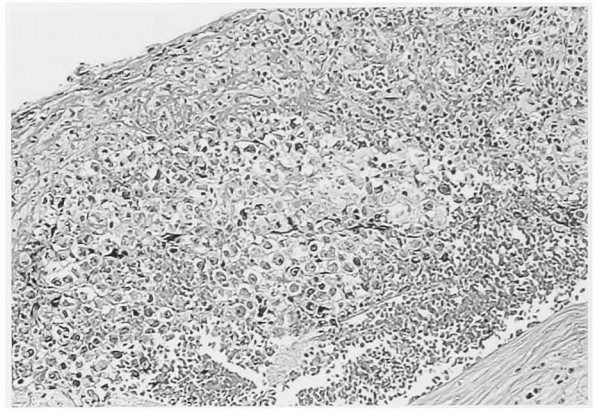


Fig. 3. Macroscopic appearance of the cross section of the resected mass; well capsulized by gross findings.

inherent structural abnormality. Carcinoma in situ or premalignant change of testicular carcinoma, is more commonly detected in abdominal testes than in testes that have undergone further descent[3]. The most

A



B

Fig. 4. Histopathological diagnosis of intra-abdominal tumor was pure seminoma. Parially, tumor had invaded over peritoneum.

common tumor developing from a cryptorchid testis is seminoma[4]. This is the same as in our case. The symptoms with intraabdominal testicular tumor are variable, but most reported cases presented with an abdominal swelling and/or abdominal pain[5-8]. An intraabdominal testicular tumor tends to be large, because the patient detects the abdominal tumor after it has enlarged. In this case, it presented with leg pain and hypoperfusion of tibial artery due to compression by the tumor. Mifigation of leg pain by resection of abdominal tumor suggests that his symptom might have been caused by compression of femoral and/or common iliac artery with a huge testicular mass.

In recent years, statistical analysis revealed the correlation between testicular carcinoma and fat consumption[9]. In this case, the patient was obese for a long period and his body mass index (BMI) was 38 at one year before the operation. During the past year he lost 30 kg in weight. He might not have noticed the abdominal swelling because of his body weight loss. To our knowledge, our case is the second largest case so far recorded. The patient of the largest case had mental retardation due to 21-trisomy[6], but our case had no psychological problem.

REFERENCES

1) Farrer JH, Walker AH and Rajfer J: Management of the postpubertal cryptorchid testis: a statistical review. J Urol **134**: 1071–1076, 1985
2) Martin DC: Malignancy in the cryptorchid testis. Urol Clin North Am **9**: 371–376, 1982
3) Ford TF, Parkinson MC, Pryor JP, et al.: The undescended testis in adult life. Br J Urol **57**: 181–184, 1985
4) Batata MA, Whitmore WF Jr, Chu FC, it al.: Cryptorchidism and testicular cancer. J Urol **124**: 382–387, 1980
5) Poliakov ED, Kuznetsov SM and Kustov SM: A giant seminoma in abdominal retention of the testis. Urol Nefrol (Mosk) **6**: 50–51, 1993
6) Kamidono S, Takada K, Ishigami J, et al.: Giant seminoma of undescended testis in Down syndrome, Urology **25**: 637–640, 1985
7) Raghavaiah NV, Rao BS and Reddy SS Jr: Giant intraabdominal seminoma: case report with a brief review of the literature. Aust N Z J Surg **44**: 147–148, 1974
8) Takahashi N, Tanaka S, Ashiki A: A giant testicular carcinoma in abdominal retention of the testis. Surg Urol **9**: 1117–1120, 1990
9) Bonner MR. McCann SE and Moysich KB: Dietary factors and the risk of testicular cancer. Nutr Cancer **44**: 35–43, 2002

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和文抄録

停留精巣に発生した巨大セミノーマの1例

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症例は25歳，男性．左膝疼痛，左下肢痺れを主訴に本院外科を受診．症状より，若年ながらも血行障害を疑われ，ドプラーエコーで脛骨動脈の流量低下を認めたために造影 CT および 3D-CT を施行し，造影効果の低い巨大な腹腔内の腫瘍および腫瘍への栄養血管を認めた．血液生化学所見で LDH および ALP の高値を認め．腹部正中切開で腫瘍摘出術施行したところ，径 25×18×12 cm，重量 3,000 g の表面平滑な腫瘍および黄色混濁の腹水を認め，細胞診検査で class V であった．腫瘍は被膜に覆われ左精巣動静脈を feeding artery，drainage vein としており，この時点で初めて左陰嚢内に精巣がないことが認識された．病理組織診断で精上皮腫 (seminoma)，一部被膜外への浸潤を認めた．これらより，放置されていた腹腔内精巣より発生した巨大精上皮腫として術後化学療法が施行され経過良好である．術後，左下肢の症状が軽快したことより腫瘍による血行障害と考えられた．本症例はこれまでに報告されたもののなかで，2番目に巨大でありまた下肢症状を主訴としたものはきわめて異例である．

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